

AMENDMENTS TO THE CLAIMS

1. (Previously Presented) A dual-coil electromagnetic valve actuator having a permanent magnet and an actuator member (11) movable between two extreme positions under the effect of a resilient member and two electromagnets each comprising a core having a T-shaped first core portion (18) with a base (19) connected to a central branch (20) with a coil (21) disposed thereabout, the first core portion (18) being placed in a U-shaped second core portion (22) having a base (23) connected to outer branches (24) which extend parallel to the central branch (20) of the first core portion (18), a permanent magnet (25) being interposed between the base of the first core portion (18) and the base of the second core portion (22), wherein, at least one of the electromagnets, the base (19) of the T-shaped first core portion (18) extends so as to co-operate with the outer branches (24) of the U-shaped second core portion (22) to present airgaps (e) of size much smaller than a distance between the base (19) of the T-shaped first core portion and the base (23) of the U-shaped second core portion.
2. (New) The dual-coil electromagnetic valve actuator according to claim 1, wherein a length of the airgaps causes said magnetic flux to pass therethrough and not pass through said permanent magnetic area.
3. (New) A dual-coil electromagnetic valve actuator according to claim 1, wherein said base of the T-shaped first core portion extends toward the outer branches of the U-shaped second core portion so that said airgaps have a length in a longitudinal direction of the base of the T-shaped first core portion.